#### PATENT COOPERATION TREATY

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

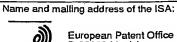
Applicant's or agent's file reference PHGB040029	FOR FURTHER ACTION	See item 4 below	
International application No. PCT/IB2005/050346	International filing date (day/month/year) 27 January 2005 (27.01.2005)	Priority date (day/month/year) 29 January 2004 (29.01.2004)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant KONINKLIJKE PHILIPS ELECTRONICS N.V.			

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis. 1(a).		
2.	This REPORT consists of a total of 5 sheets, including this cover sheet.		
	In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.		
3.	3. This report contains indications relating to the following items:		
	Box No. I	Basis of the report	-
	Box No. II	Priority	
	Box No. III	Non-establishment of op applicability	inion with regard to novelty, inventive step and industrial
	Box No. IV	Lack of unity of invention	n
	Box No. V		er Article 35(2) with regard to novelty, inventive step or industrial and explanations supporting such statement
	Box No. VI	Certain documents cited	
	Box No. VII	Certain defects in the int	ernational application
	Box No. VIII	Certain observations on	the international application
4.	4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis.2).		
			Date of issuance of this report 31 July 2006 (31.07.2006)
The International Bureau of WIPO			Authorized officer
34, chemin des Colombettes 1211 Geneva 20, Switzerland			Cecile Chatel
Facsimile No. 141 22 338 82 70			a mail: pt13@wipo int

Form PCT/IB/373 (January 2004)

### PATENT COOPERATION TREATY

•	AILITI COOPE		DEOID O'S	
From the			REC'D 2 1 APR 2005	
NTERNATIONAL SEARCHING AU	THORITY		WIPO PCT	
То:			PCT	
see form PCT/ISA/220		INTERNATION	TEN OPINION OF THE INCLUDING AUTHORITY PCT Rule 43 <i>bis</i> .1)	
		Date of mailing (day/month/year) see	e form PCT/ISA/210 (second sheet)	
Applicant's or agent's file reference see form PCT/ISA/220		FOR FURTHER ACTION See paragraph 2 below		
International application No. PCT/IB2005/050346	International filing date (27.01.2005	(day/month/year)	Priority date (day/month/year) 29.01.2004	
International Patent Classification (IPC G09G3/36	) or both national classification	and IPC		
Applicant KONINKLIJKE PHILIPS ELEC	TRONICS N.V.			
1. This opinion contains indic	cations relating to the fol	llowing items:		
☑ Box No. I Basis of the	e opinion		·	
☑ Box No. II Priority			• 0	
☐ Box No. III Non-estab	lishment of opinion with reg	gard to novelty, inventiv	e step and industrial applicability	
	ity of invention	•		
	statement under Rule 43b y; citations and explanation	is.1(a)(i) with regard to ns supporting such stat	novelty, inventive step or industrial rement	
	cuments cited			
1	fects in the international ap		•	
☐ Box No. VIII Certain ob	servations on the internation	onal application		
2. FURTHER ACTION				
If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered.				
submit to the IPFA a written	reply together, where appr	ropriate, with amendme	IPEA, the applicant is invited to ents, before the expiration of three of 22 months from the priority date,	
For further options, see Forr	n PCT/ISA/220.			
3. For further details, see notes	s to Form PCT/ISA/220.			



European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465

Wolff, L

**Authorized Officer** 

Telephone No. +49 89 2399-7049



## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050346

_			
_	Вох	No. I	Basis of the opinion
1.	With the	n rega langua	rd to the <b>language</b> , this opinion has been established on the basis of the international application in age in which it was filed, unless otherwise indicated under this item.
		langu	opinion has been established on the basis of a translation from the original language into the following age , which is the language of a translation furnished for the purposes of international search r Rules 12.3 and 23.1(b)).
2.	With	regai essary	rd to any <b>nucleotide and/or amino acid sequence</b> disclosed in the international application and to the claimed invention, this opinion has been established on the basis of:
	a. ty	pe of	material:
	[	⊐ as	sequence listing
		□ tal	ple(s) related to the sequence listing
	b. fo	ormat o	of material:
		] in	written format
	0	⊐ in	computer readable form
c. time of filing/furnishing:			filing/furnishing:
		⊐ со	ntained in the international application as filed.
		] file	ed together with the international application in computer readable form.
	. [	□ fur	nished subsequently to this Authority for the purposes of search.
3.		has b	dition, in the case that more than one version or copy of a sequence listing and/or table relating thereto een filed or furnished, the required statements that the information in the subsequent or additional is is identical to that in the application as filed or does not go beyond the application as filed, as priate, were furnished.
4.	Add	itional	comments:
_	Вох	No. I	Priority
1.	Ø	does requir	alidity of the priority claim has not been considered because the International Searching Authority not have in its possession a copy of the earlier application whose priority has been claimed or, where ed, a translation of that earlier application. This opinion has nevertheless been established on the applicant that the relevant date (Rules 43bis.1 and 64.1) is the claimed priority date.
2.		has be	pinion has been established as if no priority had been claimed due to the fact that the priority claim een found invalid (Rules 43 <i>bis.</i> 1 and 64.1). Thus for the purposes of this opinion, the international date indicated above is considered to be the relevant date.
3.	Add	itional	observations, if necessary:
			•

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050346

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-13

Claims No:

Inventive step (IS)

Yes: Claims No: Claims

Industrial applicability (IA)

Yes: Claims

1-13

1-13

No: Claims

2. Citations and explanations

see separate sheet

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/IB2005/050346

Re Item V.

As far as understood, it seems that the available prior art does not appear to disclose the special features related to the technical solution to the problem of maintaining a constant difference voltage between the "ON" gate voltage and the "OFF" gate voltage of an LCD display driven by means of TFT switching devices of which performances are sensitive to the LCD working temperature.

This has been rendered possible by means of a control circuitry shifting the complete row waveform up and down in dependence on external conditions (temperature). Thus, it seems that the technical features recited in the claim 1, could form the basis for an acceptable independent claim.

The subject-matter of claim 1 seems therefore to be novel (Article 33(2) PCT) and the solution to this problem proposed in claim 1 of the present application seems to be considered as involving an inventive step (Article 33(3) PCT).

Claims 2-13 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

### PATENT COOPERATION TREATY

From :	the .			2 1 APR 2005
From the INTERNATIONAL SEARCHING AUTHORITY				WIPO PCT
To:		İ		PCT
			WRITT	EN OPINION OF THE
	see form PCT/ISA/220			AL SEARCHING AUTHORITY
			(P	CT Rule 43 <i>bis</i> .1)
			· · · · · · · · · · · · · · · · · · ·	·
			Date of mailing (day/month/year) see	form PCT/ISA/210 (second sheet)
	cant's or agent's file reference form PCT/ISA/220		FOR FURTHER ACTION See paragraph 2 below	
		ernational filing date (d		Priority date (day/month/year)
	• • • • • • • • • • • • • • • • • • • •	.01.2005	ayxiioiniivyear)	29.01.2004
Inten	national Patent Classification (IPC) or both	national classification a	and IPC	
G09	G3/36			
Appli		20 M V		
KOI	NINKLIJKE PHILIPS ELECTRONIC	JS N.V.		
1.	This opinion contains indications	relating to the follo	owing items:	
	⊠ Box No. I. Basis of the opinion             □             □	n		
	☑ Box No. II Priority			
		•	rd to novelty, Inventiv	e step and industrial applicability
	Box No. IV Lack of unity of inv			
	Box No. V Reasoned stateme applicability; citatio	ent under Rule 43 <i>bis.</i> Ins and explanations	.1(a)(i) with regard to supporting such state	novelty, inventive step or industrial ement
	☐ Box No. VI Certain documents	cited		
	☐ Box No. VII Certain defects in t	he international app	lication	
	☐ Box No. VIII Certain observation	ns on the Internation	al application	
2.	FURTHER ACTION			
	If a demand for international prelimin written opinion of the International Pr the applicant chooses an Authority o International Bureau under Rule 66.1 will not be so considered.	reliminary Examining ther than this one to	Authority ("IPEA"). He she is and the	lowever, this does not apply where chosen IPEA has notifed the
	If this opinion is, as provided above, submit to the IPEA a written reply too months from the date of mailing of Foundation whichever expires later.	gether, where appro-	priate, with amendme	nts, before the expiration of three
	For further options, see Form PCT/IS	SA/220.		
3.	For further details, see notes to Forn	n PCT/ISA/220.		
	•			

Name and malling address of the ISA:

<u>)</u>

European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 Authorized Officer

Wolff, L

Telephone No. +49 89 2399-7049



## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050346

_				
_	Во	x N	o. I Basis of the opinion	
·1.	. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.			
		lar	is opinion has been established on the basis of a translation from the original language into the following nguage , which is the language of a translation furnished for the purposes of international search or not search searc	
2. With regard to any nucleotide and/or amIno acid sequence disclosed in the international application necessary to the claimed invention, this opinion has been established on the basis of:				
	a. t	ype	of material:	
	I		a sequence listing	
	1		table(s) related to the sequence listing	
	b. f	orm	at of material:	
	1		in written format	
	, I		in computer readable form	
	c. ti	ime	of filing/furnishing:	
	ł		contained in the international application as filed.	
	ļ		filed together with the international application in computer readable form.	
	ı		furnished subsequently to this Authority for the purposes of search.	
3.		ha co	addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto s been filed or furnished, the required statements that the information in the subsequent or additional pies is identical to that in the application as filed or does not go beyond the application as filed, as propriate, were furnished.	
4.	Add	ditio	nal comments:	
	Вох	x No	o. II Priority	
1.	×	do	e validity of the priority claim has not been considered because the International Searching Authority es not have in its possession a copy of the earlier application whose priority has been claimed or, where quired, a translation of that earlier application. This opinion has nevertheless been established on the sumption that the relevant date (Rules 43 <i>bis</i> .1 and 64.1) is the claimed priority date.	
2.		na	is opinion has been established as if no priority had been claimed due to the fact that the priority claim is been found invalid (Rules 43 <i>bis</i> .1 and 64.1). Thus for the purposes of this opinion, the international ing date indicated above is considered to be the relevant date.	
3.	Add	litio	nal observations, if necessary:	

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050346

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-13

No: Claims

Inventive step (IS)

Yes: Claims

1-13

No: Claims

Industrial applicability (IA)

Yes: Claims

1-13

No: Claims

2. Citations and explanations

see separate sheet

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/IB2005/050346

Re Item V.

As far as understood, it seems that the available prior art does not appear to disclose the special features related to the technical solution to the problem of maintaining a constant difference voltage between the "ON" gate voltage and the "OFF" gate voltage of an LCD display driven by means of TFT switching devices of which performances are sensitive to the LCD working temperature.

This has been rendered possible by means of a control circuitry shifting the complete row waveform up and down in dependence on external conditions (temperature). Thus, it seems that the technical features recited in the claim 1, could form the basis for an acceptable independent claim.

The subject-matter of claim 1 seems therefore to be novel (Article 33(2) PCT) and the solution to this problem proposed in claim 1 of the present application seems to be considered as involving an inventive step (Article 33(3) PCT).

Claims 2-13 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.